WHAT IS CLAIMED IS:

1. A fixed type constant velocity joint characterized by comprising a cylindrical joint outer ring having an inner spherical surface formed with a plurality of circumferentially equispaced axially extending track grooves, a joint inner ring having an outer spherical surface formed with circumferentially equispaced axially extending track grooves paired with the track grooves in the joint outer ring, a plurality of torque transmitting balls disposed in ball tracks defined by cooperation between the track grooves in the joint outer and inner rings, and a cage for holding the torque transmitting balls disposed in said ball tracks, wherein

a rear open end of said joint outer ring has an inner diameter larger than an outer diameter of the joint inner ring, an inner diameter surface of said cage is a surface having a shape such that the region located forwardly of the axial center is capable of controlling the forward movement of the joint inner ring while the region located rearwardly of the axial center is capable of allowing the axial movement of the joint inner ring.

2. A fixed type constant velocity joint as set forth in Claim 1, characterized in that said torque transmitting balls are eight in number.

3. A fixed type constant velocity joint as set forth in Claim 1, characterized in that the outer spherical surface is formed to extend to the rear of the joint inner ring while the end surface of a receiving section located rearwardly of said joint inner ring is formed with a concave spherical surface, whereby

the outer spherical surface of said joint inner ring is axially supported by the concave spherical surface of said receiving section.

4. A fixed type constant velocity joint as set forth in Claim 2, characterized in that the outer spherical surface is formed to extend to the rear of the joint inner ring while the end surface of a receiving section located rearwardly of said joint inner ring is formed with a concave spherical surface, whereby the outer spherical surface of said joint inner ring is axially supported by the concave spherical surface of said receiving section.

5. A fixed type constant velocity joint as set forth in Claim 3, characterized in that the radius of curvature of the outer spherical surface of the joint inner ring is set smaller than that of the inner spherical surface of the cage.

6. A fixed type constant velocity joint as set forth in Claim 4, characterized in that the radius of curvature of the outer spherical surface of the joint inner ring is set smaller than that of the inner spherical surface of the cage.

7. A fixed type constant velocity joint as set forth in Claim 3, characterized in that the outer spherical surface, which is formed in the rear of said joint inner ring, is provided by a member separate from the joint inner ring.

8. A fixed type constant velocity joint as set forth in Claim 4, characterized in that the outer spherical surface, which is formed in the rear of said joint inner ring, is provided by a member separate from the joint inner ring.

9. A fixed type constant velocity joint as set forth in Claim 5, characterized in that the outer spherical surface, which is formed in the rear of said joint inner ring, is provided by a member separate from the joint inner ring.

10. A fixed type constant velocity joint as set forth in Claim 6, characterized in that the outer spherical surface, which is formed in the rear of said joint inner ring, is provided by a member separate from the joint inner ring.

11. A fixed type constant velocity joint as set forth in any of Claims 1 through 10, characterized in that said receiving section is provided by a stem shaft fixed to the rear open end of the joint outer ring.

12. A fixed type constant velocity joint as set forth in any of Claims 1 through 10, characterized in that said receiving section is composed of a receiving member having a concave spherical surface formed in its end surface, and a stem shaft fixed to the rear open end of the joint outer ring through said receiving member.

13. A fixed type constant velocity joint as set forth in any of Claims 1 through 10, characterized in that said receiving section is provided by a receiving member having a concave spherical surface formed in its end surface and fixed directly to the rear open end of the joint outer ring.

14. A fixed type constant velocity joint as set forth in any of Claims 1 through 10, characterized in that the track grooves in said joint inner ring is formed within the range of a maximum operating angle and the area outside the range is

formed with buildups to control the axial length of the track grooves.

15. A fixed type constant velocity joint as set forth in Claim 11, characterized in that the track grooves in said joint inner ring is formed within the range of a maximum operating angle and the area outside the range is formed with buildups to control the axial length of the track grooves.

16. A fixed type constant velocity joint as set forth in Claim 12, characterized in that the track grooves in said joint inner ring is formed within the range of a maximum operating angle and the area outside the range is formed with buildups to control the axial length of the track grooves.

17. A fixed type constant velocity joint as set forth in Claim 13, characterized in that the track grooves in said joint inner ring is formed within the range of a maximum operating angle and the area outside the range is formed with buildups to control the axial length of the track grooves.

18. A method of producing a fixed type constant velocity joint, characterized by comprising the steps of inserting a cage through the front open end of a cylindrical joint outer ring to dispose the cage in its normal position within a joint inner ring, insertion-installing torque transmitting balls into the cage coinciding with a plurality of circumferentially equispaced axially extending track grooves formed in the inner spherical surface of said joint outer ring, inserting a joint inner ring through the rear open end of the joint outer ring having an inner diameter larger than the outer diameter of said

joint inner ring to pass the joint inner ring through a surface located rearwardly of the axial center of the cage and having a shape enabling the axial movement of the joint inner ring, thereby disposing the joint inner ring in its normal position.